Letters to the Editor

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Sir,

In the June 2015 issue of European Journal of Orthodontics we read with great interest the Invited Commentary ‘Methodological challenges when performing a systematic review’ by Anderson and Jayaratne (1). The commentary used our systematic review ‘The impact of malocclusion on the quality of life among children and adolescents: a systematic review of quantitative studies’ by Dimberg et al. (2), as a base for recognition of important methodological issues that need to be addressed when performing a systematic review.

We always welcome to receive constructive criticism, however, we became somewhat puzzled about many of the comments and statements made about our article. Although, the conclusive comment by Anderson and Jayaratne (1) is laudatory, many of their remarks are incorrect and also imply that our article from a methodological point of view looks poor.

Anderson and Jayaratne (1) wrote that: ‘it would have been important to have a priori plan for stratifying studies by design and quality, and to state procedures for modifying quality assessments and interpretation of findings’. In our article it is written: ‘Prior to reading the retrieved titles, abstracts, and articles, consensus was reached on the following inclusion criteria. . . .’, and further in the text: ‘each full-text version was analyzed and evaluated according to a preset protocol’ and ‘the quality assessments were performed according to a protocol by the three researchers independently’, and finally, ‘to qualify for high quality the following criteria should be fulfilled: sufficient material, relevant subgrouping, drop-out presented with a rate not greater than 30%, and control of the important confounders; caries, socio-economic factors, age and gender. If one of the criteria above was lacking, the article was downgraded to moderate. Reasons for further downgrading the quality rating of a study included shortcomings in the study design, study limitations, inconsistency of results, lack of adjustment for potential confounders, imprecision, and reporting bias’.

Anderson and Jayaratne (1) also wrote: ‘it is important to identify relevant literature and in the review by Dimberg et al. (2) only five databases were utilized’ and they give examples of further databases that we could have used, and one of these was Cochrane Library, but precisely this database was one of the five databases we have used.

Also, Anderson and Jayaratne (1) wrote that ‘hand-searching journals should have been included’, however, we performed hand-searching and it is clearly described in our article that: ‘The reference lists of articles deemed eligible were also manually searched for additional articles’.

Moreover, Anderson and Jayaratne (1) wrote: ‘Spelling differences in search terms may have also influenced the search results, for example, using “well being” returned 464 085 items while “wellbeing” returned only 6898 items, a difference of 457 187’. If Anderson and Jayaratne had carefully read our article, they should have found in our search syntax that we used ‘well being’ OR ‘wellbeing’.

Finally, Anderson and Jayaratne (1) call for a heterogeneity exploration. Of course, we could have performed this, but if Table 2 is carefully read it is obvious that different age groups and questionnaires were used between the studies as well as different registrations for malocclusions and subgrouping. This means high between-study heterogeneity, and therefore, no meta-analysis could be assessed. Eventually, the study by Ukra et al. (3) and Scapini et al. (4) could have been pooled together since those two studies showed similarity, but still, if we had performed this, the final results of our review should not be altered.

To sum up, performing a systematic review is a difficult and challenging task and there is always potential for improvement especially in terms of methodology. However, we would have expected fair, correct, and creative comments of our systematic review.

References